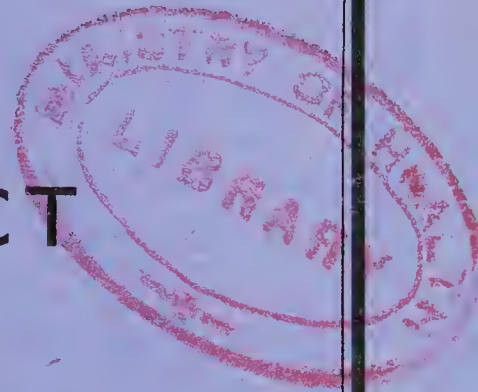


ROCHFORD
RURAL DISTRICT
COUNCIL



ANNUAL
REPORT

OF THE
MEDICAL OFFICER OF
HEALTH

(JOHN F. MACDONALD, M.D., D.P.H.)

(Barrister-at-Law)

FOR

1937

ROCHFORD AND SOUTHEND :
PRINTED BY H. F. LUCAS AND CO.

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INDEX

	Page
Ambulance Facilities	14
Bakehouses	56
Bed Bugs	42
Clinic Centres	15
Closet Accommodation	40
Committees	11, 12
Drainage and Sewerage	28—37
Dairies and Cowsheds	50, 51
Factories, Workshops and Workplaces	65
Food Inspection	50—56
Health Services in Area	11—14
Hospitals	12—14
Housing	43—48a
Infectious Diseases	57—61
Laboratory Facilities	16
Legislation in Force in Area	17—20
Meat Inspection	52, 53
Milk Supply	50, 51

	Page
Midwives	16
Overcrowding	45, 46
Petroleum Inspector's Report	62—64
Private Street Works Act, 1892	37—39
Professional Nursing in the Home	16
Public Cleansing	40
Public Health Staff	5
Restriction of Ribbon Development Act, 1935	50
Rivers and Streams	38
Sanitary Inspection of Area	41
Schools	42
Slaughterhouses	54—56
Smoke Abatement	42
Statistics and Social Conditions	6, 7, 66
Swimming Pools	42
Town Planning	49, 50
Vital Statistics	8—11
Water Supplies	21—27

WATERLOO LANE,
CHELMSFORD.

7th June, 1938.

**To the Chairman and Members of the Rochford
Rural District Council.**

MR. CHAIRMAN AND GENTLEMEN,

I have the honour of presenting for your consideration my Annual Report on the health and sanitary circumstances of your district for the year 1937.

For much assistance rendered in the preparation of this Report, I am indebted to Mr. Ellis, your Sanitary Inspector. For statistical and legislative information, I am indebted to Mr. Harris, and to Mr. Madge for the information relating to houses erected, etc., also to the Southend Waterworks Company for information regarding the water supply in the district.

For the sympathetic consideration and assistance received during the year, I beg to thank the Council.

I am, Mr. Chairman and Gentlemen,

Your obedient Servant,

JOHN F. MACDONALD.

ROCHFORD RURAL DISTRICT

PUBLIC HEALTH OFFICERS.

S. C. Harris Clerk.

John F. Macdonald

M.D., D.P.H. Medical Officer of Health, who
is also Medical Officer of
Health for the Chelmsford and
Maldon Rural Districts..

M. C. Barton

Clerk to the Medical Officer of
Health.

Bertram G. Ellis, A.R.San.I.

Sanitary Inspector and Hous-
ing Inspector under the Hous-
ing and Town Planning Act,
1909.

R. F. Stripp Clerk to the Sanitary Inspector.

R. E. Smith Assistant Sanitary Inspector.

A. C. Madge Surveyor.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA

Area (acres)	36,080	.. (land and inland waters)
Resident Population mid. 1937	..	16,650	(estimated by Registrar General)
1931 census population	..	13,969	.. (6,864 males, 7,105 females)
Number of inhabited houses at 1931 census	3,489	
Number of inhabited houses at the end of 1937 according to the rate books		4,597	
Number of unoccupied houses on 31st, December, 1937.		*843	
The Rateable value of the District for the half-year ended 31st March, 1937		£87,203	
The Rateable Value of the District for the half-year ended 30th September, 1937.		£84,805	
Product of a penny rate, year ended 31st March, 1937.		£325/13/8	

* A large proportion of these are Summer Residences.

Social Conditions. A large proportion of the adult population is engaged in agriculture and owing to the railway facilities an increasing number of people engaged in business in Greater London reside in the district.

To a limited extent, brick-making is carried on, but there are no large factories or works of any kind.

The industries carried on in the district cannot be said to be detrimental to the health of those engaged therein.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR

		Total	M.	F.	
Live Births	Legitimate ..	199	112	87	} Birth-rate per 1,000 of the estimated resident population 12.6
	Illegitimate ..	11	4	7	
Still Births	Legitimate ..	7	5	2	} Rate per 1,000 total (live and still) births 32.3
	Illegitimate ..	—	—	—	
Deaths	..	198	99	99	Death-rate per 1,000 of the estimated resident population* 11.1.

Deaths from Puerperal causes :

	Deaths	Rate per 1,000 of total (live & still) births
Puerperal sepsis ..	—	—
Other Puerperal causes	1	4.6

Number of deaths of infants under 1 year of age—18

Males 8 (illegitimate 0), Females 10 (illegitimate 1).

Deaths of infants under 1 year of age—

Legitimate infants per 1,000 legitimate live births ..	85.4
Illegitimate „ „ „ illegitimate „ „ ..	90.9
Total „ „ „ total „ „ ..	85.7
Death from Measles (all ages)	Nil
„ „ Whooping Cough (all ages)	Nil
„ „ Diarrhœa (under 2 years of age)	6

COMPARATIVE TABLE OF BIRTH AND DEATH RATES DURING THE YEAR 1937.

	Rate per 1,000 resident population.		Deaths under one year per 1,000 registered live births.
	Live Births.	Deaths from all causes.	
England and Wales ..	14.9	12.4	58
125 County Boroughs and great towns including London	14.9	12.5	62
148 smaller towns with estimated resident population of from 25,000 to 50,000 ..	15.3	11.9	55
Rochford Rural District ..	12.6	11.1	86

*This figure, to render it comparable with the death rate for the country as a whole, has to be multiplied by the "Comparability Factor," 0.79, which has been supplied by the Registrar General as requisite to redress the abnormal constitution of the local population from the point of view of age and sex components. Applying this factor, the corrected death rate is 8.8 as compared with 12.4 for the country as a whole.

The following tabular statements give details of the number of deaths classified according to cause, sex and age :

Causes of Death	Males	Females	Totals
Typhoid and Paratyphoid Fever.. ..	—	—	—
Measles	—	—	—
Scarlet Fever	—	—	—
Whooping Cough	—	—	—
Diphtheria	—	—	—
Influenza	2	6	8
Encephalitis Lethargica	—	—	—
Cerebro Spinal Fever	—	—	—
Respiratory Tuberculosis	5	2	7
Other Tuberculosis	—	—	—
Syphilis	—	—	—
General Paralysis of the Insane	1	—	1
Cancer, Malignant Disease	13	17	30
Diabetes	—	4	4
Cerebral Haemorrhage, etc.	6	7	13
Heart disease	28	31	59
Aneurysm	—	—	—
Other Circulatory Diseases	5	—	5
Bronchitis	1	1	2
Pneumonia (all forms)	6	3	9
Other Respiratory Diseases	—	1	1
Peptic Ulcer	1	—	1
Diarrhoea, (under 2 years)	3	3	6
Appendicitis	2	—	2
Cirrhosis of liver	—	—	—
Other Liver Diseases	—	—	—
Other Digestive Diseases	6	4	10
Acute and Chronic Nephritis	—	1	1
Puerperal Sepsis	—	—	—
Other Puerperal Diseases	—	1	1
Congenital debility, Premature Birth, .. etc.	2	4	6
Senility	3	4	7
Suicide	2	—	2
Other deaths from violence	5	2	7
Other defined diseases	8	8	16
Causes ill-defined or unknown	—	—	—
Totals	99	99	198

NUMBER OF DEATHS ACCORDING TO AGE
AND SEX.

Age					Male	Female	Total
Under 1 year	8	10	18
1 and under 2	1	—	1
2	„	5	—	2	2
5	„	15	2	1	3
15	„	25	1	4	5
25	„	35	4	5	9
35	„	45	4	8	12
45	„	55	3	6	9
55	„	65	14	11	25
65	„	75	29	28	57
75 and over	33	23	56
Totals					99	98	197

Note—The above total is 1 less than that given by the Registrar General.

The natural increase in the population, namely, the excess of the number of births over the number of deaths, is shown in the following tabular statement for the years 1931-1937.

During 1931 there were	298	births and	209	deaths, giving a natural increase of	89
" 1932	" 285	" 189	" "	" "	96
" 1933	" 268	" 202	" "	" "	66
" 1934	" 217	" 187	" "	" "	30
" 1935	" 206	" 168	" "	" "	38
" 1936	" 221	" 146	" "	" "	75
" 1937	" 210	" 198	" "	" "	12

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA

The District Council consists of 22 elected members who meet monthly.

The following Committees deal directly or indirectly with health matters :

- Public Health
- Housing
- Town Planning and Plans
- Finance
- Sewerage
- Pleasure Grounds
- General Purposes
- Air Raid Precautions
- Rating and Valuation

The Council is represented on the :—

- South-East Essex United Districts (Medical Officer of Health) Committee.
- Isolation Hospital Joint Committee.
- South-East Essex Joint Hospital Board.
- South-East Essex Superannuation Joint Committee.
- South-Eastern Essex Assessment Committee.
- South-Eastern Area Guardians Committee.
- Rural District Councils' Association. (Essex Branch).
- South-Eastern Air Raid Precautions Area Committee.

Agenda papers and reports of the Committees are sent out to all members before each Council Meeting.

The minutes of the Council are circulated.

HOSPITALS PROVIDED OR SUBSIDISED BY THE LOCAL AUTHORITY OR BY THE ESSEX COUNTY COUNCIL :—

(1)—Tuberculosis Hospitals. A number of Sanatoria are available throughout the county. These are provided by the County Council. None of the Institutions so provided is in Rochford Rural District.

(2)—Maternity. Arrangements are made under the County Council's Scheme with certain Hospitals to admit :—

(a) Complicated cases of confinement,

(b) Cases that cannot be safely left at home,

(c) Cases of Puerperal Pyrexia,

and

(d) Expectant mothers for whom Hospital treatment is necessary.

In connection with (c) an Obstretic Specialist is available for consultations with medical practitioners.

(3)—Children. Arrangements are made by the County Council for :

(a) The examination of children at an Orthopædic Ascertainment Clinic and for institutional treatment of cases recommended by the Orthopædic Surgeon.

- (b) Skilled nursing in the home, or Hospital treatment where necessary for cases of Ophthalmia Neonatorum.
 - (c) Hospital treatment for children suffering from minor ailments, such as tonsils and adenoids.
- (4)—Other Hospitals. Cases requiring treatment in a General Hospital are admitted to Southend Municipal Hospital, Rochford, under an arrangement with the County Borough of Southend-on-Sea and the Essex County Council. Residents in the district are also admitted for treatment to voluntary hospitals in Southend and London.
- (5)—Isolation Hospital. The Hospital at Sutton Ford is administered by a Joint Committee representing the Rural District of Rochford and the Urban Districts of Benfleet, Canvey Island and Rayleigh.

The accommodation consists of :—

An administrative block with dining room, Matron's room, kitchen and bathroom on the ground floor, and six bedrooms on the first floor.

Four wards, each having accommodation for three beds.

A temporary wooden pavilion with accommodation for eight beds.

There are also provided the necessary out-houses, such as washhouse and disinfectors. A motor ambulance is stationed at the Hospital.

Institutional provision for unmarried mothers, illegitimate infants and homeless children in the Area :—The only accommodation is that provided by the Public Assistance Committee.

Ambulance Facilities :—

- (a) For infectious diseases there is a motor ambulance which is stationed at the Isolation Hospital at Sutton Ford.
- (b) For non-infectious and accident cases arrangements have been made with the St. John Ambulance Brigade (Southend Division) and the Rayleigh Ambulance Committee for their ambulances to be available for cases in the Rural District.

An agreement is in force for the reciprocal use of ambulances throughout the County of Essex.

CLINICS AND TREATMENT CENTRES (All provided by the County Council).
 Maternity and Child Welfare Centres.

Centre.	Address.	Sessions.	Medical Officer.
Hockley	Methodist Hall	1st and 3rd Fridays in each month	Dr. A. R. Graham
Rochford	Congregational Rooms	Mondays	Dr. J. B. Ratcliffe
Rochford (Ante natal Clinic)	„	4th Friday in each month	„
Rochford	„	2nd Friday in 2nd month of each quarter	„
(Toddler's Clinic)	„	2nd and 4th Thursdays in each month	„
Great Waking ..	Village Hall		
Great Waking			
(Ante natal Clinic)	„	1st Thursday in each month	„

NOTE—All the above clinics commence at 2.30 p.m.

Weighing Centre.	Foulness Island.	2nd Tuesday in each month at 2.30 p.m.
School Minor Ailments Clinics.	Address. Rochford Congregational School Rooms.	Hours of Sessions. 2nd and 4th Mondays, in each month at 2 p.m.
Dental Clinic.	No fixed centre.	Held at Schools as and when required.
Tuberculosis Dispensary.	Address. Porters Grange Avenue, Southend-on-Sea.	Hours of Sessions. Wednesdays—Males 2.15 p.m. „ Females 3.15 p.m.
Treatment Centres for Venereal Diseases :	Facilities available at Southend, Chelmsford and at a number of London Hospitals.	

Professional Nursing in the Home.

(a) General—No arrangements have been made by the District Council, but for General Nursing there are a number of local Nursing Associations throughout the district that employ nurse-midwives. These are under the supervision of the County Nursing Association, and the District Council has no control, either direct or indirect, over them.

(b) For Infectious Diseases.—No arrangements have been made by the District Council.

Midwives.—There were eleven midwives practising in the district at the end of 1937.

Registered Nursing Homes.—There is none in the district.

LABORATORY FACILITIES.

These services are provided at 91, Queen Victoria Street, London, E.C.4., by Drs. Beale and Suckling, partly under the Essex County Council Scheme.

Water Analysis. During the year 7 samples were analysed.

The following Bacteriological specimens were examined :—

Diphtheria	..	230
Sputa	38
Typhoid	1
Ringworm	..	-
General	4
Ice Cream	..	-
Water	1
Sewage	-

274

In addition, 27 samples of milk were examined biologically for the Tubercle Bacillus. Of these samples, 22 proved negative, 3 proved positive, and 2 were inconclusive.

LEGISLATION IN FORCE

The Council has the following Urban powers :—

Public Health Act, 1875.

Section(s)	Subject	Parish(es) to which Powers apply
169, 170	Powers to make Bye-laws with respect to slaughterhouses.	The whole district.
(also 29, 30 and 31 of Public Health Acts (Amendment) Acts, 1890).		
66	Fire Hydrants	Ashingdon, Barling, Canewdon, Great Wakering, Hockley, Hawkwell, Little Wakering, Rochford, South Fambridge and Sutton (confirmed 28th November, 1927).
		Stambridge (confirmed 25th February, 1935).
164	Public Pleasure Grounds.	Hockley.

Confirmed by the Ministry of Health 26th May, 1930

Part VI. of the Public Health Acts Amendment Act, 1907, and Part VI. of the Public Health Act, 1925.	In force for Hockley from 13th April, 1931.
133 Provision of facilities for prevention of Diphtheria.	In force for whole district from 18th November, 1935
Section 133 Public Health Act, 1875 is repealed and re-enacted at Section 177 Public Health Act 1936.	
171 So far as it incorporates Sections 24 to 27 of the Town Police Clauses Act, 1847.	In force for Rochford from 25th November, 1935.

ADOPTIVE ACTS

Public Health Acts (Amendment) Act, 1907.

†*Sections 15, 16, 17, 18, 20, 22, 28, 29, 30, 31, 32 and 33 comprised in Part II.	Came in force on the 6th December, 1909, and is applicable to the whole district.
--	---

†Sections 15, 16 and 33 as amended by the Public Health Act, 1936.

*Any powers granted to Rural District Councils in respect of Sections 18, 20, and 29 of the Public Health Acts (Amendment) Act, 1907, ceased to be exercisable from 1st April, 1930, in accordance with the Local Government Act, 1929, and are now administered by the County Council.

Sections 53 and 54 comprised in Part IV.

BYE-LAWS AND REGULATIONS ADOPTED:—

1. Relating to tents, vans, sheds.

Adopted 1905. Apply to the whole district.

Revised and new bye-laws allowed by Ministry of Health, 22nd October, 1929.

2. Relating to new streets and buildings.

Adopted 18th January, 1927, replacing those of 1914 which had replaced those of 1906. Apply to the whole district except Foulness and Havengore.

3. Relating to Hairdressers' and Barbers' Premises.

Adopted 4th February, 1936 and confirmed by Ministry of Health, 11th February, 1936. In force from 1st April, 1936, and apply to the whole district.

NOTE:—As a result of the Essex Review Order, 1934, a number of Bye-Laws adopted prior to 1924 are no longer in force.

THE PUBLIC HEALTH ACTS, 1875 & 1890

Under the Rural District Councils (Urban Powers) Order, 1931, made by the Minister of Health, the following enactments came into force for the whole of the Rural District, as from the 1st day of September, 1931 and have not been repealed by the Public Health Act 1936.

The Public Health Act, 1875.

*Section 26 (prohibition of building over sewers or under streets), *s. 157 and *s. 158 (building byelaws), so much of s. 160 as relates to obstructions, projections, etc., obstructing passage along streets, s. 164 (public walks and pleasure grounds), s. 165 (public clocks), s. 172 (horses, etc., standing for hire and pleasure boats) and s. 197 (provision of offices).

* These sections have been amended by the Public Health Act 1936

The Public Health Acts Amendment Act, 1890.

Section 34 (hoards during building), s.35 (cellars under streets), s. 38 (byelaws as to steam whirligigs, swings, shooting galleries etc.), ss. 39, 40 (refuges and cabmen's shelters in streets), s. 42 (statues and monuments in streets, etc.), s. 43 (planting of trees in highways), ss. 44 to 46 (public walks and pleasure grounds and public clocks).

WATER SUPPLY

With the exception of Foulness, all the water mains in the district belong to the Southend Waterworks Company. This company has statutory powers to supply water throughout the entire district.

At the end of 1937 the Company had in the district over 55 miles of service mains of a diameter of from 3ins. to 6ins., in addition to 14 miles of trunk mains.

From time to time the service mains of the company are extended.

(a) On the Company's own initiative.

(b) Under a contract with the District Council who guarantee an income from water rates as a result of such extension, up to an agreed sum, for three consecutive years.

The Secretary of the Southend Waterworks Company has forwarded particulars of the steps taken by his Company to ensure that only pure and wholesome water is put into supply.

“ An excess lime plant is installed at Langford, where waters from the Rivers Chelmer, Ter and Blackwater are treated, the following procedure being adopted.

After being stored for ten days the water is pumped to the Purification Works where it is divided in the ratio of 1 : 6. The smaller portion is mixed with lime to produce sufficient lime water to give an excess of 2 grains of lime per gallon when united with the larger portion, which has meanwhile been treated with alumina. The whole of the water then enters the Mixing Tanks where it is thoroughly agitated and from there it passes to Dortmund or Settling Tanks, where a very heavy and flocculent precipitate settles out. The water then flows to the Contact Tanks where there is close contact between the water and lime for a period of 22 hours or so. The water then passes to the Carbonating Chamber where Carbon Dioxide derived from coke is forced into the water in order to precipitate the excess lime and partially redissolve it.

The water is also dosed with ground activated carbon to remove any taste or odour and to improve the palatability of the treated product.

Finally, and to complete the treatment, the water is passed through Rapid Gravity Quartz sand filters.

In addition to this thorough treatment, a Chlorinating Plant is also available should it at any time be thought desirable to take exceptional precautions.

The Company has on its Staff a fully qualified Chemist and Bacteriologist with Staff and Laboratory at Langford, and a daily sample for complete analysis is taken prior to the treated water leaving for distribution.

A weekly sample is also taken for complete analysis from varying points in the Area.

An eminent firm of consulting chemists carry out a quarterly inspection of the Langford Works and take occasional samples in the Company's Area of Supply for chemical and bacteriological examinations. The results throughout 1937 have been up to the usual high standard."

A copy of an analysis is given on page 25.

Particulars of the extensions carried out during the year 1937 are as follow :—

Parish					Length of main in yds.	Size of main in ins.
Ashingdon	397	4
Canewdon	364	6
Hawkwell	497	4
Hockley	1,731	4
Rochford	24	4

Total 3,013

= 1 mile 1,253 yards.

The following table shows the approximate number of dwelling-houses in the parishes and the number supplied from the Southend Waterworks Company's mains on 31st December, 1937.

PARISH	Number of Houses on 31st December, 1937	
	In Parish (Estimated)	Supplied from Mains
Ashingdon	299	299
Barling	110	61
Canewdon	215	182
South Fambridge	89	61
Hawkwell	877	788
Hockley	1117	860
Rochford	1313	1271
Stambridge	147	66
Sutton	63	34
Great Wakering	831	721
Little Wakering	150	98
Totals ..	5211	4441

The following is a copy of the analysis of a recent sample taken from the Southend Waterworks Company's mains.

Chemical Results in parts per 100,000

Turbidity	Clear and Bright.
Colour	Normal.
Odour	Nil.
Reaction pH.	Neutral, 7.2
Free Carbonic Acid	—

Chemical Results in parts per 100,000

Electric Conductivity at 20° C.	410
Total Solids, 180° C.	27.5
Chlorine in Chlorides	3.5
Nitrogen in Nitrates	0.60
Nitrites	Absent
Hardness : Permanent	12.0
Temporary	0.5
Total	12.5
Metals	Absent
Free Ammonia	0.0046
Albuminoid Ammonia	0.0092
Oxygen absorbed in 4 hours at 80° F.	0.110

Bacteriological Results

No. of Bacteria per c.c.—

On Agar in 3 days at 20° C. 27

,, ,, ,, 24 hours at 37° C. 5

The Bacillus Coli Present in— Absent in 100 c.c.

Bacillus Welchii Present in— Absent in 100 c.c.

(B. Enteriditis Sporogenes)

REPORT :—This is a clear and bright water, of normal colour, neutral reaction and of moderate hardness. The water contains no excess of saline matter, is free from metals and of a satisfactory degree of organic quality. Bacteriologically it is of the highest degree of purity. It is a pure and wholesome water, suitable for drinking and domestic purposes.

(Signed) JOHN F. BEALE

For Drs. Beale and Suckling.

Particulars of the water supplies of the remaining areas in the district not at present served by the Southend Waterworks Company are as follows :—

Parish	Census 1931 Population	Supply
Foulness	.. 414	During 1914 the Government purchased the Island, and improved its piped water supply.
Havengore	.. 12	Private deep well.
Paglesham	.. 311	Private shallow wells.

DRAINAGE AND SEWERAGE.

Rochford, Ashingdon, Hawkwell and Hockley

On the 29th December 1930 the contract for providing sewers in the combined parishes of Rochford, Ashingdon, Hawkwell, Hockley and additional sewers in the parish of Rochford, was commenced.

The length of sewers provided in this scheme is approximately 12 miles and with the exception of valley sewers laid through fields, the whole of the sewers are laid in roads repairable by the Highway Authority. The whole of the sewers gravitate to the existing outfall at Rochford and were available for house drainage connections in May 1933.

At the request of the Ministry of Health, the existing purification works at Rochford were transferred to a new site at Stambridge, and the existing continuous flow sedimentation tanks converted to deal with the increased volume of sewage.

A further scheme of sewerage for the parish of Eastwood was commenced on the 18th May, 1931, and in addition this sewer also takes part of the sewage from Thundersley, which forms part of the Benfleet Urban Council's area, by arrangement with the Council. The Benfleet Urban Council contribute towards the expenses.

With the exception of a small portion known locally as Anne Boleyn Estate (which area is dealt with by a subsidiary pumping station), the whole of the sewers gravitate to the main outfall works at Rochford, and were available for house drainage connections in May 1933.

MAIN PUMPING STATION AT ROCHFORD.

The old Storage and Sedimentation Tanks have been converted into Detritus Tanks and new Pump Wells and Pump Chambers constructed with Engine House over.

An automatic set of pumps driven by electricity has been installed with the following capacities :

Two 5" Stereophagus Centrifugal Pumps, each capable of pumping 525 gallons per minute or $1\frac{1}{2}$ x D.W.F. when working together.

One 6" ditto, capable of pumping 785 gallons per minute or 2 x D.W.F. when working together.

The Storm Water over 3 x D.W.F. is dealt with by two 8" Fullway Centrifugal Pumps, each capable of pumping 2,100 gallons per minute or 6 x D.W.F.

The sewage up to three times the D.W.F. is pumped for treatment to the new Sewage Disposal Works at Stambridge.

The storm water is pumped into the old and new Settlement Tanks at the existing Pumping Station Site, having a total capacity of 126,337 gallons or 6 hours D.W.F., and the effluent after settlement is discharged into the River Roach.

SUBSIDIARY PUMPING STATION AT SUTTON ROAD.

This Pumping Station, which serves the Anne Boleyn Estate and area adjoining, is equipped with two 3" pumps

and automatic equipment similar to the main station and each capable of pumping 210 gallons per minute or 6 x D.W.F., from a population of 2,000.

The sewage is pumped into the main sewer near the Anne Boleyn Hotel, from which point it gravitates to the main Pumping Station before referred to.

SEWAGE DISPOSAL WORKS AT GREAT STAMBRIDGE.

These works are designed to deal with the sewage from a population of 20,000 with a water consumption of 25 gallons per head per day. The works deal with all the sewage up to 3 x D.W.F., the storm flow over this amount being dealt with at the site of the main Pumping Station at Rochford as previously described.

The works consist of Balancing Tanks in duplicate, Continuous Flow Settlement Tanks, which are in triplicate, four circular Percolating Filters and three Humus Tanks. The effluent is discharged into the tidal waters of the River Roach. Provision is also made by means of valves, to distribute the effluent on to land if so desired by the owners.

The sludge is dried on underdrained clinker beds and the drainings from the beds are pumped back to the works for purification.

A small Pumping Station is provided for pumping the sludge which cannot be discharged by gravity and for pumping the sludge drainings back to the Settlement Tanks.

The capacities of the various units are as follow :—

Balancing Tanks. No 2 of Dortmund type, the capacity of the two being 83,334 gallons=4 hours D.W.F.

(NOTE :—The cone is not included in the capacity, being used only for the collection of sludge.)

Continuous Flow Settlement Tanks. No. 3 of Dortmund type, total capacity 250,000 gallons=12 hours D.W.F.

Rotary Sprinkler Percolating Filters. No 4 each 110 feet diameter and 6 feet deep, filled with graded clinker media. Total capacity, 8,334 cubic yards=D.W.F. 60.

Humus Tanks. No 3 Dortmund type, total capacity 83,333 gallons=4 hours D.W.F.

Sludge Drying Beds. These consist of 20 clinker filled beds underdrained by a system of pipes discharging into a pumping sump. The total area of the beds is 2,688 square yards, being approximately 1 square yard to every $7\frac{1}{2}$ persons.

THE SEWERS.

The total length of the sewers draining to the main outfall at Rochford is approximately 21 miles. All sewers are laid at self-cleansing gradients, and provided with necessary manholes and ventilation shafts.

COST.

The total cost of these two schemes was £151,077, and they were carried out by means of a grant from the Unemployment Grants Committee who contribute 75 per cent of the cost for a period of 15 years, and $37\frac{1}{2}$ per cent for the second 15 years.

No exceptional engineering difficulties were experienced.

GREAT WAKERING SEWERAGE AND SEWAGE.

Disposal Scheme.

Owing to the tightening up of the conditions relating to grants by the Unemployment Grants Committee, this scheme was commenced by the Surveyor to the Council on the 28th December 1931, pending the acceptance of a Contract by the Council as it was a condition imposed by the Unemployment Grants Committee that the scheme had to be commenced before the 31st December 1931, to obtain a reduced Grant of 25 per cent towards the cost of the scheme, otherwise the grant would be withdrawn

The length of sewers laid in the parish is approximately 5 miles and with the exception of valley sewers laid through fields, the whole of the sewers are laid in roads repairable by the Highway Authority.

All sewers gravitate to the Pumping Station and the sewage is pumped to the Purification Works for treatment.

PUMPING STATION.

The Pumping Station is designed for automatic working and it is of interest to note that the power units are Diesel Engines with batteries for starting purposes and a small dynamo for re-charging during pumping.

The pumps consist of two 4" "Unchokeable" centrifugal pumps capable of pumping 320 gallons per minute when working together, or 6 x D.W.F. from a population of 3,000.

SEWAGE DISPOSAL WORKS.

The works are designed for a population of 2,500 and consist of Detritus Tanks, Continuous Flow Settlement Tanks, Percolating Filters, Humus Tank and Storm Water Tanks.

The detritus Tanks are two in number and have combined capacity for 1/50th D.W.F.

The Continuous Flow Settlement Tanks consist of two Dortmund type with a total capacity of 39,063 gallons or 15 hours D.W.F. based on a water consumption of 25 gallons per head.

The Percolating Filters are circular in shape and fed by rotary sprinkler arms. The diameter of each is 60 feet and an average depth of 5 feet. The total capacity of the two is 1,402 cubic yards or one cubic yard for every 60 gallons of sewage. The media is of graded clinker.

The Humus Tank is of the Dortmund type and has a capacity of 10,400 gallons or 4 hours D.W.F.

The two Storm Tanks are rectangular in shape and have a total capacity of 15,625 gallons or 6 hours D.W.F.

The effluent is discharged into Havengore Creek.

The sludge is dried on underdrained clinker beds, having an area of 427 square yards, allowing 6 persons per square yard. The sludge drainings are pumped back to the Settlement Tanks.

Considerable engineering difficulties were encountered in carrying out this scheme, owing to the nature of the ground, with the result that the actual cost of the scheme was £35,764 against the original contract sum of £29,081, or an excess expenditure of £6,683.

The whole scheme to the extent of the estimated expenditure of £29,081 is assisted by the Grant of 25 per cent for a period of 30 years from the Unemployment Grants Committee.

The western outfall was available for house drainage connections in 1933, and the eastern outfall in 1934.

This scheme was prepared by and supervised by Messrs. Lemon and Blizard, Consulting Engineers, Westminster.

Comprehensive Scheme of Sewerage.

In February last, I prepared a report on a comprehensive scheme of sewerage and/or extensions estimated to cost £189,942 embracing the following parishes, viz. :

Ashingdon	Rochford.
Barling	Stambridge.
Canewdon	Sutton
Fambridge, South	Wakering, Great.
Hawkwell	Wakering, Little.
Hockley (Hullbridge)	

After careful consideration, the Council instructed me to prepare a modified scheme to deal with parishes and/or part of, where development warranted the provision of sewerage, and/or extensions to the present sewerage system.

This modified scheme is now being prepared, and I hope to report thereon to the appropriate Committee early in the new year.

Sewer Extensions.

The Council's policy is to extend sewers from time to time in areas which appear to them to be insanitary, but no area has called for special treatment this year.

853 yards of sewer has been laid in four private streets under the Private Street Works Act 1892, at an estimated cost of £1,475 8s. 11d.

Canewdon.

The drainage of several houses finds its way into five open ditches which are periodically cleansed.

Paglesham.

A short length of sewer discharges into the Creek and owing to its slight fall, has to be periodically flushed.

A hand pump is provided for this purpose.

Stambridge.

Two short lengths of sewers are provided, and one discharges into a pond, and the other into a pond which is periodically cleansed.

SEWER EXTENSIONS—Private Estate Roads

During the year Sewers were provided or extended in Private Estate Roads as follows:—

Parish	Street	1937				TOTAL
		To Dec. 31st, 1936.		Private Street Works Act, 1892		
		Council	Private Enter-prise	Council	Private Enter-prise	
Ashingdon		yards —	yards 80	yards —	yards —	yards 80
Rochford		679	2582	—	—	3261
	Rochefort Drive	—	—	—	226	444
	Leicester Avenue	—	—	—	218	
Hawkwell		—	555	—	—	555
Hockley		67	430	—	—	497
	Station Road	—	—	—	252	409
	Bramerton Road	—	—	—	157	
Great Wakering		216	—	—	—	216
	TOTALS	962	3647	—	853	5462

HOUSE DRAINAGE CONNECTIONS

The Number of House Drainage Connections made during the year ended December 31st, 1937.

Parish						Connections.
Ashingdon	1
Hawkwell	10
Hockley	18
Rochford	49
Great Wakering	10
					Total ..	88

As the Council allow houses to be drained in combination, 146 houses have been connected by the 88 connections above referred to.

Private Street Works Act, 1892.

Having provided sewers in the populous parishes of their District, the Council are desirous of extending sewers and making up private streets under the Private Street Works Act, 1892, where the development of such streets makes it possible.

The Council have therefore entered into an agreement with the Essex County Council, who are prepared to allow the Council to act as their agents in carrying out this work.

A schedule has been prepared, of the roads requiring attention, and the schemes on page 39, as per schedule, have been

1. approved by the Essex County Council, and works completed, or
2. approved, and in course of construction, or
3. approved, but not yet commenced, or
4. prepared and awaiting the approval of the Essex County Council.

RIVERS AND STREAMS

There are no important rivers actually in the area. The river Crouch forms the northern boundary and the river Roach flows through Rochford. These are both tidal rivers.

SCHEDULE OF PRIVATE STREET WORKS

under the Private Street Works Act, 1892.
December 31st, 1936—December 31st, 1937

No.	Parish.	Street.	Scope of Scheme.	Estimated Cost.
				£ s. d.
SCHEMES COMPLETED, but Final Apportionments not yet approved by E.C.C.				
1.	Rochford	St. Andrews Road	Road construction and surface water sewer.	1765 11 5
2.	Hockley	Station Road	Soil Sewer	369 7 10½
3.	Gt. Wakering	Alexandra Road	Road construction and surface water sewer	3467 19 3
4.	Rochford	Rochefort Drive	Soil Sewer	399 14 10½
5.	Rochford	Leicester Avenue	Soil Sewer	406 18 8
6.	Hockley	Bramerton Road	Soil Sewer	299 7 6
SCHEMES APPROVED by E.C.C., and in course of construction.				
7.	Hawkwell	Hawkwell Chase (1st portion)	Soil Sewer	660 4 0
8.	Hawkwell	Hawkwell Chase (2nd portion)	Soil Sewer	544 4 11
9.	Rochford	Rochford Avenue	Road construction and surface water sewer	2583 10 2
10.	Rochford	Rocheway	Road construction and surface water sewer	1259 9 2
SCHEMES APPROVED BY E.C.C., but not yet commenced.				
11.	Gt. Wakering	Twyford Avenue	Road construction and surface water sewer .	2104 16 7½
12.	Rochford	Sutton Court Drive	Soil Sewer	170 7 0½
13.	Rochford.	Ravenswood Chase	Soil Sewer	240 9 0
14.	Hockley	Plumberow Avenue	Soil Sewer	1440 15 5
15.	Hockley	Plumberow Mount Av.	Soil Sewer	273 5 3
SCHEMES PREPARED and awaiting approval of E.C.C.				
16.	Hockley	Gt. Eastern Road.	Soil Sewer	380 0 0
17.	Hockley	Retreat Road	Soil Sewer	179 0 0
18.	Hockley	Gladstone Road	Soil Sewer	527 1 6
19.	Hockley	Hawkwell Road	Soil Sewer	148 0 0
20.	Hockley	Highams Road	Soil Sewer	350 0 0
21.	Hockley & Hawkwell			
22.	Hawkwell	Hockley Rise	Soil Sewer	494 10 11½
23.	Hawkwell	Hillside Avenue	Soil Sewer	560 19 6
24.	Hockley	Poplars Avenue	Soil Sewer	385 5 8
		Woodlands Road	Soil Sewer	549 6 6

CLOSET ACCOMMODATION

The following table shows the approximate number of sanitary conveniences at the end of the year :—

Water closets with proper flushing arrangements	4139
Water closets hand flushed	291
Pail closets, a small proportion of which have an arrangement of distributing dry earth	834
Privies	153
Privies abolished during the year	9

PUBLIC CLEANSING

The following are particulars of the Scavenging Services at the end of 1936 and 1937, classified according to Parish :—

Parish	Scheme	1936		1937	
		No. of Houses Scavenged for		No. of Houses Scavenged for	
		House Refuse	Night Soil	House Refuse	Night Soil
Ashingdon	Combined Departmental	137	—	152	—
Barling	Contract	81	58	85	66
Canewdon	Combined Departmental	168	133	173	135
South Fambridge	do.	56	22	56	24
Hawkwell	do.	594	6	614	5
Hockley	do.	638	63	667	59
Rochford	do.	1170	42	1248	42
Stambridge	do.	111	78	115	83
Sutton	do.	41	—	41	—
Sutton	Contract	—	—	5	—
Great Wakering	do.	665	68	700	72
Little Wakering	do.	121	86	125	95
Totals		3782	556	3981	581

SANITARY INSPECTION OF THE AREA.

The following table, prepared by the Inspector, shows the number of inspections and particulars of notices for the year.

Summary of Inspections and Nuisances.

Inspections		Notices				
Nature of	Number	Out-standing at end of 1936	Informal	Formal	C'plied with	Out-standing at end of 1937
Disinfection	44	—	—	—	—	—
Infectious Diseases	61	—	—	—	—	—
Housing	357	9	63	13	67	5
Overcrowding	273	—	—	—	—	—
Schools	9	—	—	—	—	—
Cowsheds and Dairies	73	—	18	—	18	—
Milkshops	17	—	—	—	—	—
Bakehouses	19	—	2	—	2	—
Slaughterhouses	453	—	5	—	5	—
Knacker's Yard	11	—	2	—	2	—
Butchers' Shops	28	—	1	—	1	—
Privies	23	—	10	—	10	—
Water Closets	82	—	9	—	9	—
Cesspools overflowing	186	—	42	—	42	—
House Drainage	260	18	65	5	64	19
Defective Traps	—	—	—	—	—	—
Water Supply	349	—	91	5	86	5
Wells Cleansed	21	—	3	—	3	—
Dirty Houses	41	—	4	—	4	—
Drainage Reconstructions	3	—	1	—	1	—
Ashbins	80	—	31	2	29	2
Scavenging	249	—	—	—	—	—
Fried Fishshops	12	—	1	—	1	—
Tents, Vans and Sheds	184	—	—	—	—	—
Other Nuisances	179	—	12	—	12	—
Totals	3014	27	360	25	356	31

There were also 29 inspections made of premises occupied by Ice-Cream Vendors and 11 inspections of Hairdressers' Saloons

Smoke Abatement

No action was found necessary during the year.

Swimming Baths and Pools

There is none in the district.

Eradication of Bed Bugs

1.	(a)	Number of Council Houses	(i)	found to be infested.....	1
			(ii)	disinfested.....	1
	(b)	„ „ other	(i)	found to be infested	12
		„ „ „	(ii)	disinfested.....*	12

*Of these 12—2 were afterwards demolished.

2. Special printed instructions were issued to the tenants at the time of inspection and an insecticide (Zaldecide) was given free of charge and a spray loaned to carry out the necessary spraying.

3. The belongings of tenants about to move into Council Houses were inspected and where found to be infested were removed and steam disinfected or destroyed.

4. All work in connection with the disinfestation was carried out by the Local Authority. All crevices behind mouldings, architraves, pictures rails, floors, etc., as well as likely harbours in defective plaster were well sprayed with Zaldecide. Where necessary skirtings and other mouldings were removed before spraying. Any bedsteads or other furniture found to be infested were dismantled as necessary and sprayed.

Schools.

The sanitary condition and water supply in connection with each school were given in the Survey Report of 1935.

HOUSING

STATISTICS FOR THE YEAR 1937

Number of new houses erected during the year :—

(a)	Total (including number given separately under (b))	209
(b)	Under the Housing Acts—	
	(i) By the Local Authority	38
	(ii) By other bodies or persons	Nil

These are set out according to parish on page 47.

1. Inspection of dwelling-houses during the year :—

(1)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	173
	(b) Number of inspections made for the purpose	357
(2)	(a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	56
	(b) Number of inspections made for the purpose	68
(3)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation. ..	11

(4)	Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ..	81
2.	Remedy of defects during the year without service of formal notices :—	
	Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	51
3.	Action under Statutory Powers during the year :—	
	(A)—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—	
	(1) Number of dwelling-houses in respect of which notices were served requiring repairs	13
	(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
	(a) By owners	16
	(b) By Local Authority in default of owners	Nil
	(B)—Proceedings under Public Health Acts :—	
	(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	12
	(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	

(a) By owners	5
(b) By Local Authority in default of owners. . .	Nil

(C)—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made ..	10
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ..	19

(D)—Proceedings under Section 12 of the Housing Act, 1936 :—

(1) Number of separate tenements or under ground rooms in respect of which Closing Orders were made	Nil
(2) Number of separate tenements or under-ground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil

4. Housing Act, 1936—Part IV—Overcrowding :—

(a)—(i) Number of dwellings overcrowded at the end of the year	18
(ii) Number of families dwelling therein ..	18
(iii) „ „ persons (Equivalent) dwelling therein	122½
(b)—Number of new cases of overcrowding reported during the year	10

(c)—(i)	Number of cases of overcrowding relieved during the year	31
(ii)	Number of persons (equivalent) concerned in such cases	196½

(d)—	Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	1
------	--	---------	---

(e)—Good progress has been made during the year towards the abatement of overcrowding, the number of cases existing at the end of 1937 being 18, as compared with 39 a year before.

Observation is kept of the records of border line houses so that when they become overcrowded due to the increasing ages of the inmates they are reported to the Public Health Committee.

STATEMENT SHOWING THE NUMBER OF HOUSES ERECTED IN THE DISTRICT DURING THE YEAR.

PARISH	Number of houses erected during 1937.			Number of houses in course of erection at the end of 1937		
	By District Council	By Private persons	Totals	By District Council	By Private Persons	Totals
Ashingdon	11	11	..	5	5
Barling
Canewdon	2	2	..	2	2
Foulness
South Fambridge..	1	1
Havengore	16	16	..	18	18
Hawkwell	42	42	..	70	70
Hockley	2	8
Paglesham ..	6	73	73	..	41	41
Rochford	4	4
Stambridge
Sutton ..	32	18	50	..	6	6
Great Wakering	3	3	..	1	1
Little Wakering
Totals ..	38	171	209	..	144	144

**NUMBER AND TYPE OF HOUSES OWNED BY THE
DISTRICT COUNCIL AT END OF 1937.**

PARISH	Number of Non-Parlour Type	Number of Parlour Type	Totals
Ashingdon	—	—	—
Barling	16	—	16
Canewdon	40	—	40
South Fambridge ..	—	—	—
Foulness	—	—	—
Havengore	—	—	—
Hawkwell	—	—	—
Hockley	—	—	—
Paglesham	12	—	12
Rochford	92	58	150
Stambridge	28	—	28
Sutton	—	—	—
Great Wakering ..	98	—	98
Little Wakering ..	—	—	—
Totals	286	58	344

HOUSING ACT, 1936.

RURAL DISTRICT OF ROCHFORD.

RETURN REGARDING THE HOUSING CONDITIONS OF PERSONS OF THE WORKING CLASSES.

PARISH	No. of houses known to be totally unfit for human habitation or otherwise requiring to be demolished.								No. of houses known not to be in all respects reasonably fit for human habitation							No. of houses in which over-crowding is known to exist				Provision of New Council Houses					
	No. on 31st December, 1936		No. found during year ended 31st Dec. 1937		No. during period 1st Jan. to 31st Dec., 1937			No. on 31st December, 1937		No. on 31st December, 1936		No. found during year ended 31st Dec. 1937		No. rendered habitable during period 1st Jan. to 31st Dec. 1937	No. on 31st December, 1937		No. cases at 31st Dec., 1936	No. found during 1937	No. remedied during 1937	No. remaining on 31st Dec. 1937	No. erected during year ended 31st Dec. 1937	Estimated No. of houses required during year ending 31st March, 1939 to meet		Total No. of houses approved by Minister but not completed	Total No. of houses contemplated for erection in the year ending 31st Mar. 1939 but not yet approved by Minister
	Occupied	Unoccupied	Occupied	Unoccupied	Undertaking given not to use for human habitation	Demolished	Rendered Habitable	Occupied	Unoccupied	Occupied	Unoccupied	Occupied	Unoccupied		Occupied	Unoccupied						Over-crowding	Normal Expansion		
Ashingdon	—	—	—	—	—	—	—	—	—	2	2	3	2	8	—	1	1	1	—	2	—	—	—	—	—
Barling ..	—	—	—	—	—	—	—	—	—	9	—	1	—	1	9	—	3	—	2	1	—	—	—	—	—
Canewdon	—	—	—	1	1	—	—	—	—	6	5*	15	8	14	12	7	5	1	4	2	—	—	—	—	—
Foulness ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S. F'bridge	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	—	—	—	—	—	—
Havengore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hawkwell	—	1	—	2	—	2	—	—	1	3	—	4	—	5	2	—	4	1	3	2	—	—	—	—	—
Hockley ..	6	4	—	—	—	4	—	1	5	—	—	4	1	5	—	—	6	1	5	2	—	—	—	—	—
Paglesham	1	—	1	1	—	2	—	1	—	1*	1*	1	2	—	1	2	1	—	—	1	6	—	—	—	—
Rochford..	12	7	1	3	1	8	—	8	6	3	—	9	3	13	1	1	6	4	9	1	—	—	—	—	—
Stambridge	—	—	—	—	—	—	—	—	—	1	—	7	1	4	5	—	2	—	1	1	—	—	—	—	—
Sutton ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gt. Wak'ing	4	1	2	—	—	3	—	3	1	8*	—	17	2	17	7	1	10	1	5	6	32	—	—	—	—
Lt. Wak'ing	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—
Totals	23	13	4	7	2	19	—	13	13	33	8	62	19	67	38	12	39	10	31	18	38	—	—	—	—

*5 houses used for other purposes than human habitation not included—Canewdon 1, Gt. Waking 2, Paglesham 2.

TOWN PLANNING

All Parishes, excluding Foulness, are scheduled for Town Planning under the Town and Country Planning Act 1932.

The Draft Scheme has been approved by the Essex County Council, and same has now been adopted by Resolution of the Rochford Rural District Council.

As the Rochford Rural District Council are not the Highway Authority, the scheme has to be prepared in conjunction with the Essex County Council, and every effort is made for the proposed scheme to co-ordinate with the schemes of adjoining Authorities, viz., Rayleigh and Benfleet Urban Districts and the County Borough of Southend-on-Sea.

Playing Fields.

Public Open Spaces or Playing Fields have now been provided in the following parishes, viz. :—

Rochford
Great Wakering
Ashingdon.

Professor S. D. Adshead, M.A., F.R.I.B.A., has prepared a Report of the Regional Scheme for South-East Essex which includes the whole of the Rochford Rural District.

Corporation of Southend-on-Sea.

The Corporation of Southend-on-Sea have Schemes in operation which include a portion of the following parishes :—

Great Wakering and Sutton

and all building plans submitted for approval in these areas are

referred to the Corporation for consideration before finally approving same.

Restriction of Ribbon Development Act, 1935.

Under the Restriction of Ribbon Development Act 1935, all plans deposited with the Council for proposed buildings on classified roads have to be referred to the Essex County Council, and their consent must be obtained before any work is commenced.

INSPECTION AND SUPERVISION OF FOOD.

(a) Milk Supply.

Five Supplementary Licences to sell milk under the Milk (Special Designations) Order 1936, were issued during this year. Two Licences to sell "Tuberculin Tested" (Pasteurised) and "Pasteurised" Milks were issued to a limited Company operating rounds within the District from premises outside, and two Licences to sell "Tuberculin Tested" and "Pasteurised" Milks were issued to a Limited Company with a depot in the District. One Licence to sell "Tuberculin Tested" (Pasteurised) Milk was issued to a registered retailer in the District.

(b) Dairies, Cowsheds and Milkshops.

At the end of the year there were forty-seven Cowkeepers, in addition to sixteen Retail Purveyors and one wholesale and retail Purveyor of Milk, making a total of sixty-four.

Six new Producers were registered ; three as wholesale Purveyors, one as a Wholesale and Retail Purveyor of Milk, and two as Retail Purveyors.

Nine Producers gave up business and of these, five were Wholesale Purveyors, two Wholesale and Retail Purveyors and two Retail Purveyors.

PERSONS IN RESPECT OF WHICH APPLICATION FOR REGISTRATION HAS BEEN MADE SINCE THE PASSING OF THE MILK AND DAIRIES (AMENDMENT) ACT, 1922, AND TRADING ON 31st DECEMBER, 1937

Parish	Cowkeepers' Premises		Not Cowkeepers		Totals
	Wholesale Purveyors of Milk	Wholesale and Retail Purveyors	Retail Purveyors of Milk	Wholesale and Retail Purveyors	
Ashingdon ..	2	2	1	1	7
Canewdon ..	7	2	—	—	10
Foulness ..	—	—	2	—	2
S. Fambridge ..	2	1	1	—	5
Hawkwell ..	—	—	1	—	1
Hockley ..	3	2	6	—	12
Paglesham ..	—	1	—	—	1
Rochford ..	3	3	4	—	10
Stambridge ..	2	2	—	—	4
Sutton ..	2	2	—	—	4
Gt. Waking ..	1	2	1	—	6
Lt. Waking ..	—	—	—	—	1
Wallasea I. .. (Paglesham)	1	—	—	—	1
Totals ..	23	17	16	1	64

(b) **Meat and other foods.**

On the 1st April, 1925, the Public Health (Meat) Regulations, 1924 came into force, which necessitated the inspection of slaughtered animals. On the 1st of January, 1934, the Slaughter of Animals Act, 1933 came into operation, which provides for the registration of slaughtermen.

There were 31 Licenced Slaughtermen slaughtering in the district on the 31st December, 1937.

Although the inspection of all carcasses has been impossible, 453 visits were paid to the Slaughterhouses during the year, and as a result 2,301 lbs. of meat have been destroyed, as shown in the following tabular statement :—

<i>Month</i>	<i>Pork</i>	<i>Beef</i>	<i>Mutton</i>	<i>Veal</i>	<i>Total</i>
January	166	280	—	—	446
February	51	—	—	—	51
March	40	16	4	—	60
April	162	—	—	56	218
May	44	645	—	—	689
June	14	640	—	—	654
July	7	—	—	—	7
August	—	5	—	—	5
September	21	—	—	—	21
October	63	—	—	—	63
November	60	7	—	6	73
December	14	—	—	—	14
<hr/>					
Totals	642	1,593	4	62	2,301
<hr/>					

In most cases the condemned meat is collected by Messrs. Powling's of Stambridge and taken to London for various manufactories.

CARCASES INSPECTED AND CONDEMNED

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed (if known) ..	—	—	—	—	—
Number inspected	69	—	30	177	2,638
All diseases except Tubercu- locis :—					
Whole Carcases condemned	—	—	1	—	2
Carcases of which some part or organ was con- demned	1	—	1	1	19
Percentage of the number in- spected affected with disease other than Tuberculosis ..	1.45%	—	6.66%	0.56%	0.79%
Tuberculosis only :—					
Whole Carcases condemned	1	—	—	—	1
Carcases of which some part or organ was con- demned	5	—	—	—	26
Percentage of the number in- spected affected with Tu- berculosis	8.69%	—	—	—	1.02%

Slaughterhouses

There are 13 Slaughterhouses in the district, distributed as follows :—

Barling, 1 ; Canewdon, 1 ; Foulness Island 1 ; Great Wakering, 3 ; Hockley, 2 ; Rochford, 4 ; Sutton, 1.

5 of these are about 100 feet from the nearest dwelling-house

2 „ „ 40-50 feet „ „ „ „ „

6 „ „ within 15 feet of „ „ „ „ „

The number of slaughterhouses in January, 1926 and 1930 and December, 1937 is given in the following tabular statement :—

	In Jan. 1926	In Jan. 1930	In Dec. 1937.
Registered	7	7	7
Licensed	7	7	6
	—	—	—
	14	14	13
	—	—	—

Registered and licensed slaughterhouses at the end of 1937 are as follows :—

Parish.	Name and Address of Occupier
Registered—	
Rochford	Fance, A., The Square. Palmer, W. E., Palmer's Corner Searles, C. F., North Street. Turner, W. H., West Street.
Hockley	Emery and Son, High Road.
Great Wakering	Webb, J. F. & Son, High Street Oliver, W., & Son, High Street.

Licensed (in date order)—		Date of first being granted a licence
Canewdon	Moss Bros., Post Office.	25/10/24.
Barling	Murrell, H. S. High House.	25/11/24.
Great Wakering	Sayer, S. C., High Street	14/10/27.
Sutton	Hamilton, E., Sutton Bridge Farm	3/6/30.
Foulness Island	Hawkes, W., 15, Court End	28/6/32.
Hockley	Tarrant, G., Blue House Farm, Bull Lane	26/6/34.

The use of a mechanically operated instrument for slaughtering purposes has been carried out in every case, in accordance with the Slaughter of Animals Act, 1933.

The instrument most used in the slaughterhouses is the "Cash" Captive Bolt Pistol, which is giving satisfaction. A Greener Safeti Killer is also used in two slaughterhouses.

Generally speaking, the construction of the slaughterhouses is good and cleanliness is well maintained.

With so many slaughterhouses the proper supervision and control of the meat supply in the district is not practi-

able. The solution would be in the provision of a public slaughterhouse if the authority could abolish all the existing slaughterhouses.

Bakehouses

There are 9 in the district, distributed as follows :—

Canewdon, 1 ; Foulness Island, 1 ; Great Wakering, 3 ;
Rochford, 3 ; Stambridge, 1.

In two cases informal notice to cleanse the premises was found necessary.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

Infectious Diseases Generally

During the year 48 cases of infectious diseases (exclusive of Tuberculosis) were notified, as compared with 55 during 1936 and 59 during 1935.

No use was made during the year of the tests known as the Schick and Dick tests in Diphtheria and Scarlet Fever respectively, or of the artificial methods of immunization against these diseases.

No vaccinations under the Public Health (Smallpox Prevention) Regulations, 1917, were performed by the Medical Officer of Health during the year.

In the table on page 58, cases of infectious diseases notified are classified according to age and disease. The number of deaths and the number of cases removed to hospital are also given. In the table on page 59 the infectious diseases notified are classified according to locality.

Notifiable Diseases during the Year.

Disease	Total	Under 1	1—2	2—3	3—4	4—5	5—10	10—15	15—20	20—35	35—45	45—65	65 and over	Total cases admitted to hospital	Total Deaths
Scarlet Fever ..	17	—	1	3	1	—	5	5	—	2	—	—	—	14	—
Diphtheria ..	13	2	1	2	1	—	1	3	1	1	—	—	—	13	—
Erysipelas ..	3	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Pneumonia ..	7	1	2	—	—	—	—	—	—	—	1	—	2	—	1
(Primary & Influenzal)															
Puerperal Fever ..	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Puerperal Pyrexia ..	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(including Paratyphoid)															
Ophthalmia ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Neonatorum ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ..	3	—	—	2	—	—	—	—	—	—	—	1	—	2	—
Dysentery ..	48	5	4	7	2	—	7	6	3	7	1	3	3	29	1
Totals ..	48	5	4	7	2	—	7	6	3	7	1	3	3	29	1

Note—Figures in the Column “Total Deaths” with regard to pneumonia refer only to cases notified

DISTRIBUTION OF INFECTIOUS DISEASES DURING
THE YEAR 1937

Parish	Scarlet Fever	Diphtheria	Enteric Fever incl. Paratyphoid	Puerperal Fever	Puerperal Pyrexia	Pneumonia	Acute Poliomyelitis	Ophthalmia Neonatorum	Erysipelas	Dysentery	Pulmonary Tuberculosis	Other forms of Tuberculosis	Total
Ashingdon ..	3	1	1	2	1	..	8
Barling ..	3	3
Canewdon ..	1	1	2
Fambridge, South	1	1
Foulness
Havengore
Hawkwell ..	1	2	1	..	2	2	1	9
Hockley ..	2	1	..	1	..	2	1	..	3	1	11
Paglesham ..	1	1	2	..	4
Rochford ..	3	8	2	1	2	16
Stambridge	1	1
Sutton
Wakering, Great	3	2	..	5
Wakering, Little
Totals ..	17	13	—	1	1	7	1	2	3	3	9	3	60

PREVENTION OF BLINDNESS.

No action was taken during the year under Section 66 of the Public Health Act, 1925, or under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.

TUBERCULOSIS.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from Pulmonary Tuberculosis employed in the milk trade), or under Section 62 of the Public Health Act, 1925, or Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to hospital of persons suffering from Tuberculosis).

TUBERCULOSIS

Four of the seven persons whose death occurred during the year due to Tuberculosis had been previously notified as suffering from the disease.

The ratio of non-notified Tuberculosis deaths to the total Tuberculosis deaths was 43 per cent.

New Cases and Mortality during 1937.

The table below shows the new cases of Tuberculosis and of deaths from this disease in the area during 1937, classified according to sex and age.

Age	†New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
Under 1
1—5
5—10
10—15
15—20	..	1	1	1
20—25	..	1	..	1	..	1
25—35	3	1	1
35—45	..	1	2
45—55	1	..	1
55—65	2
65 and over	1
Totals	6	3	1	2	5	2

†Not including cases of Tuberculosis removed into the district during the year which had been previously notified elsewhere.

INFECTIOUS DISEASES NOTIFIED DURING
THE YEARS 1931-1937

DISEASE	1931	1932	1933	1934	1935	1936	1937	Totals
Smallpox	1	—	—	—	—	—	—	1
Scarlet Fever	36	36	107	43	34	33	17	306
Diphtheria	33	31	28	37	10	13	13	165
Pneumonia	10	18	29	13	8	6	7	91
Erysipelas	7	8	6	7	5	—	3	36
Puerperal Fever	1	2	3	2	2	—	1	11
Puerperal Pyrexia	1	—	2	—	—	1	1	5
Enteric Fever	5	—	—	—	—	—	—	5
Encephalitis Lethargica	1	—	—	—	—	—	—	1
Ophthalmia Neonatorum	—	3	3	3	1	1	2	13
Acute Poliomyelitis	—	—	2	—	—	1	1	4
Dysentery	—	—	—	—	—		3	3
Pulmonary Tuberculosis	5	11	21	5	8	6	9	65
Other forms of Tuberculosis	3	8	3	1	2	7	3	27
Totals	103	117	204	111	70	68	60	733

REPORT OF PETROLEUM INSPECTOR

Mr. Chairman and Gentlemen,

The work undertaken by your Sanitary Inspector as such, is incorporated in the Medical Officer of Health's Report.

The following gives particulars of work undertaken as Petroleum Inspector.

Petroleum Acts

During the year 44 licences were renewed, 3 new licences were granted by the Council to store petrol, 4 licensees gave up storing and 112 inspections were made for the purpose.

Applicants for licences are required to complete a form giving particulars of their premises wherein it is proposed to store the spirit, together with the method and capacity of storage, also to furnish a plan of the proposed installation. Upon inspection it is ascertained whether the conditions are as stated and also whether the provisions of the Acts have been observed.

An annual fee is payable in respect of every licence or renewal of licence, by the person to whom the licence is granted in accordance with the fixed scale of the Petroleum (Consolidation) Act, 1928, First Schedule, as follows :—

						Fee Payable.		
In respect of a licence to keep a quantity—						£	s.	d.
Not exceeding 100 gallons	0	5	0
Exceeding 100 gallons, not exceeding 500 gallons						0	10	0
„ 500	„	„	„	1,000	„	0	15	0
„ 1,000	„	„	„	5,000	„	1	0	0
„ 5,000	„	„	„	10,000	„	2	0	0
„ 10,000	„	„	„	20,000	„	3	0	0
„ 20,000	„	„	„	50,000	„	4	0	0
„ 50,000 gallons	5	0	0

The following table shows the number and distribution of Petroleum Licences at the end of the year 1937 :—

Parish	Name of Licencee	Maximum Licensed Storage			Fee
		In under-ground tanks	In two-gallon cans	Total	
Barling	Johnson, A.	500	—	500	10/-
	Murrell, H. S.	300	—	300	10/-
Canewdon	Davey and Armitage	500	—	500	10/-
	Moss Bros.	500	—	500	10/-
	Renwick, J. N.	500	—	500	10/-
	Williams, H. and Son	500	—	500	10/-
Foulness Is.	Fitch, W.	—	48	48	5/-
S.Fambridge	Rowley, N. T.	500	—	500	10/-
Hawkwell	Ayres, E.	500	—	500	10/-
	Gregory, E.	2000	—	2000	20/-
	Hooker, G. E.	1000	—	1000	15/-
Hockley	Blower, M.	300	—	300	10/-
	Morling, W. V.	2100	—	2100	20/-
	Potter, I. G.	1000	—	1000	15/-
	Sheppard, A. E.	500	—	500	10/-
	Coe, E. H.	500	—	500	10/-
	Withers, S. G.	500	—	500	10/-
	L.N.E.R.	50	50	100	5/-
		(in tank of	stand-by	plant)	
Paglesham	Loader, T. H.	—	100	100	5/-
	Martin, A. D.	800	—	800	15/-
Rochford	Burles, J.	500	—	500	10/-
	Cottis and Sons	1500	—	1500	20/-
	Cowling, P.	—	40	40	5/-
	Hurst, F. J. and Sons	500	—	500	10/-
	Milton Hall Brick Co. Ltd.	100	—	100	5/-
	(Barrels)				
	Rochford R.D.C.	500	—	500	10/-
	Roughton, H. J.	800	—	800	15/-
	Southend Flying Services	2000	250	2250	20/-
	(Portable carrier)				
	Squier, A. W.	500	—	500	10/-
	Turner, W. H.	500	—	500	10/-
	Warren, C. and F., Ltd.	2500	—	2500	20/-
	Whiting, A.	2000	—	2000	20/-
	Whittingham, W. H.	2000	—	2000	20/-
	(Increased from 1500 to 2000 gallons)				
	Willans, G. H.	500	—	500	10/-

(Continued)

Parish	Name of Licencee	Maximum Licensed Storage			Fee
		In under-ground tanks	In two-gallon cans	Total	
Stambridge	Powling, E. J.	500	—	500	10/-
	Rankin, A. M. and H., Ltd	500	—	500	10/-
	Smith, Mrs. D.	1000	—	1000	15/-
Sutton	Steel, A.	500	—	500	10/-
Wakering, Gt	Church, J.	500	—	500	10/-
	French, E. D.	300	—	300	10/-
	Gt. Wakering Brick Co. ..	2250	—	2250	20/-
	Kirby, C. R.	500	—	500	10/-
	Mott, R.	1000	—	1000	15/-
	Rayner, C.	500	—	500	10/-
Wakering, Little	Clark, Mrs. F. M. ..	500	—	500	10/-
Wallasea Is. (Canewdon) (Paglesham)	Taylor, F. E. A.	300	—	300	10/-
	Wallasea Bay Yacht Station, Ltd. ..	1000	—	1000	15/-
Totals ..		35800	488	36288	£28/0/0

Carbide of Calcium

The following table shows the number and distribution of Carbide of Calcium Licences issued during the year :—

Parish	Licencee
Great Wakering ..	Alp, W. (to store 5 cwts.)

I beg to remain,

Your obedient Servant,

BERTRAM G. ELLIS.

FACTORIES, WORKSHOPS & WORKPLACES

1.—Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Prosecutions (4)
Factories (including Factory Laundries)	2	Nil	Nil
Workshops (Including Workshop Laundries)	10	1	Nil
Workplaces (Other than Outworkers' Premises)	15	3	Nil
Totals	27	4	Nil

2.—Defects found in Factories, Workshops and Workplaces

Particulars (1)	Number of defects			Number of Prose- cutions (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
<i>Nuisances under the Public Health Acts.—†</i>				
Want of cleanliness	2	2	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
insufficient	—	—	—	—
Sanitary accommodation { unsuitable or defective	2	2	—	—
not separate for sexes	—	—	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Other offences (Excluding offences relating to out- work and offences under the Sections mentioned in the Sched- ule in the Ministry of Health (Factories and Workshops Trans- fer of Powers) Order, 1921).	—	—	—	—
Totals	4	4	—	—

† Including those specified in Sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

TABLE SHEWING POPULATION AND NUMBER OF HOUSES OCCUPIED AT CENSUS 1931, AND NUMBER OF HOUSES BOTH OCCUPIED AND UNOCCUPIED AT DECEMBER 1937.

PARISH	Area in Statute acres (land and inland waters).	Census 1931		No. of houses at end of 1937	No. of houses occupied at end of 1937	No. of houses unoccupied at end of 1937
		Houses	Population			
Ashington	1166	189	504	299	259	40
Barling	1285	106	380	110	110	—
Canewdon †	5643	188	637	215	183	32
Fambridge, South	1191	85	282	89	75	14
Foulness	6082	110	414	111	110	1
Havengore	296	2	12	3	3	—
Hawkwell	1361	600	1744	877	758	119
Hockley	3817	820	2016	1117	714	403
Paglesham	2029	105	311	115	101	14
Rochford	3023	603	3965	1313	1189	124
Stambridge	3054	140	549	147	139	8
Sutton	1541	43	237	63	57	6
Great Wakering	3200	612	249	8831	762	69
Little Wakering ..	2392	125	420	150	137	13
Totals	36,080	3728	13,969	5,440	4597	*843

*A large percentage of these are Summer residences.

†Including detached portion of parish of Eastwood on Wallasea Island.

